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WEATHER, p. 2 FRI: 36°F 24°F SAT: 50°F 32°F Showers SUN: 46°F | 23°F

Partly cloudy

Friday, March 2, 2012 Volume 132, Number 8

Friends trod over fresh snow back to their dorms yesterday evening. The Prudential Tower gleams across the river through a cold haze.

# Being a first generation student

# A look at the expectations, challenges, and opportunities

By Maggie Lloyd CONTRIBUTING EDITOR

Last Monday, a group of about 40 students gathered in Twenty Chimneys for a seemingly normal evening meal. From the outside, it looked like any other student group event with free food. In reality, these students shared one very personal experience: they were first-generation (FG) students.

MIT defines FG students as those who will be the first in their family to graduate from a four-year college. They make up 16 percent of MIT students, undergraduate and graduate a percentage typical for private top-tier universities, yet about half that of the national average, said Miri E. Skolnik, assistant dean of Student Support Ser-

Being FG presents unique challenges to which non-FG students may not relate. Skolnik recalls the story of Alfred Lubano, an FG student who attended Columbia University in the mid-70s while his father worked as a bricklayer outside his son's classrooms. Lubano and his father would sometimes ride the subway home together, Lubano with his books and his father with his equipment, without anything to talk about. "Related by blood, we're separated by class, my father and I," Lubano wrote in his article "Bricklayer's Boy."

Almost four decades later, stories of the challenges faced by first-generation students still exist across the nation, and MIT is no exception.

Ruben T. Alonzo '11 has been one of several student advocates for the recently-established First Generation Project (FGP), a joint program between the UAAP and S3 to serve the FG community. Skolnik, the FGP' sponsoring dean, and physics professor John W. Belcher, the FGP faculty sponsor, wrote an article titled "First Generation Project launched" for the January/February 2012 issue of the Faculty Newsletter. "It goes without saying that in spite of these circumstances, FG students possess tremendous resourcefulness, survival skills, initiative, and self-reliance," Skolnik and Belcher wrote.

Part of their article included Alonzo's compelling story as an FG student. Alonzo, who learned about MIT merely three weeks before the application deadline, was originally planning on joining the military straight out of high school to support his family of migrant farm workers in Crystal City, Texas. His visit during CPW was eyeopening: "When I visited MIT, it was unlike anything I had ever seen. Never

in my life was I surrounded by so many intellectuals," the article read.

After the CPW visit, he vowed to use his education to end the cycle of poverty in his family. "I had lost my father to drugs and my older brother was serving a six-year prison sentence," Alonzo wrote. Once he arrived at MIT for his first semester, however, Alonzo was faced with a heart-wrenching situation.

'In only my second week of class during my freshman year, my mother delivered the news that she had been diagnosed with stage-four breast cancer. Treatments required traveling to a cancer clinic 100 miles away from Crystal City, a trip she could barely afford. Without a father or older brother to rely on, the financial burden fell on my shoulders. After my freshman fall semester, I never purchased another textbook again, in order to send all of my money home to my family. The absence of textbooks never compared to the days I went hungry."

Alonzo was awarded with the \$30,000 Truman Scholarship in his junior year, which he used for the Harvard Graduate School of Education.

After the award was announced, Skolnik sat Alonzo down for an infor-

First generation, Page 12

# Pres. search committee to meet soon

#### Reed wants decision made with 'deliberate haste,' hopes for summer

By Ethan A. Solomon

The MIT Corporation has set the wheels in motion for replacing President Susan I. Hockfield. who announced her resignation on Feb. 16 and will continue as president until a replacement is sworn in. James A. Champy '63, who led the search committee that selected Hockfield, will again chair the presidential search committee. Chairman of the MIT Corporation John S. Reed '61 has hopes that the

begin its work next week. The bulk of a presidential search is carried out by a com-

committee will be formed and

mittee comprised of Institute faculty and Corporation members. This search committee recommends a small number of candidates to the Corporation's Executive Committee - a group of Corporation members and some of the Institute's top administrators - who then formally nominate candidates for a majority vote by the Corporation's voting members (64 people — the Corporation's eight ex officio members do not get a vote).

committee must be "broadly representative of the community," said Reed. "The mix is always faculty, students, and corporation members."

"The idea is to get a committee that reflects the different points of view, the different interests, and so forth and so on,"

To build a search committee, Reed says he has asked Chair of the Faculty Samuel M. Allen PhD '75 to prepare a list of faculty that are "broadly representative" of MIT's constituent schools. Reed suspects that all of the committee's faculty will be tenured, since junior faculty are generally too busy.

Serving on a presidential search committee "qualifies as a big assignment" that junior faculty usually do not take on, added Allen in a phone inter-

Reed guesses the finalized committee will have roughly 8-10 faculty members, complemented by a slightly larger group of Corporation members. Students will not serve on the committee directly, but Chancellor Eric Grimson PhD '80 has been asked to form a group of undergraduate and graduate students who will serve in an advisory capacity.

"I'm told [the student advisory group] was extremely effective and useful" in MIT's last presidential search, said Reed.

Reed says the committee will

SearchComm, Page 7

#### IN SHORT

April Housing Lottery Requests will be

**Quarter 4 PE Registration opens** at 8 a.m. on Wednesday, March 7 at http:// mitpe.com/registration/mit-undergraduate-student/default.aspx.

The MIT/Wellesley Toons will have their annual Concert for a Cure to benefit multiple sclerosis this Saturday, March 3 at 8 p.m. in 34-101. It will feature MIT Mocha Moves, MIT Asian Dance Team, MIT Roadkill Buffet, and groups from other colleges in the area.

Send news information and tips to news@tech.mit.edu.

# Baker to head biology dept.

#### Discusses department goals and passion for science

By Anne Cai NEWS EDITOR

E.C. Whitehead Professor, Biology Graduate Program Co-Director, and Howard Hughes Medical Institute (HHMI) Investigator Tania A Baker has been named as the next head of the department of biology. She will assume the position on April 1, succeeding Chris A. Kaiser PhD '88, who was selected to run the National Institute of General Medical Sciences (NIGMS) in October. Baker was the associate department head for biology from 1999 to 2004.

"Professor Baker, like her predecessor Chris Kaiser, is a former MacVicar Faculty Fellow who will, I am sure, maintain the department's standing as a premier educator of biologists, and as a world-leading department in biological research," said School of Science Dean Marc A. Kastner in a statement through the News Office. "I am thrilled that she has agreed to take on the leadership of the department at a time when biology plays a bigger role than ever at the Institute."

The Tech caught up with Baker in her office to talk about her goals for the biology department and her career.

The Tech: How do you feel about becoming the new biology department head?

Tania Baker: I am honored to have the confidence of my colleagues and the

Biology head, Page 6

#### **UA fails to ratify** constitution and bylaws, again

The Undergraduate Association failed for a second time Tuesday evening to approve its core governing documents. With only 14 representatives of the 19-member UA Council (the council should be made up of 21 people, but Bexley did not select a representative, and off-campus is not yet represented) present at their second-ever meeting, only a couple of dissenting votes or abstentions were able to kill motions to pass the UA Constitution and the UA Bylaws.

The UA needs to ratify a new constitution and set of bylaws in order to formalize their new government structure, in which a Council of dormitory and FSILG representatives replaces the UA Senate. Instead of direct election of senators, Council members are selected by a process internal to their constituencies. Each dormitory is represented by a single representative, the Interfraternity Council by four, the Panhellenic Association by three, the Living Group Council by one, and off-campus by one.

Last week, at the Council's inaugural meeting, a constitutional vote was delayed to allow members to propose amendments and further review the governing documents. But at Tuesday's meeting, some Council representatives said they had insufficient time to review and discuss proposed amendments, or were not told of them until shortly before the meeting started. Among those were Ryan Normandin '13 of MacGregor House (also a Tech opinion columnist), Jonte M. Craighead '13 (holding a proxy

UA, Page 7

#### **DON'T SHUT DOWN FUSION LAB**

Cancelling Alcator C-Mod experiments will hinder energy research. OPINION, p. 4

#### ADDRESSING MENTAL HEALTH

MIT should create a task force to address mental health issues. OPINION, p. 5

#### **MEN'S VOLLEYBALL: WINNERS!**

Team victorious in Saturday's Baruch College invitational. SPORTS, p. 16



#### **CONTINUING THE CORE BLITZ WORKOUT**

Russian twist? Deadbug? Dead stretch? Learn short circuits to keep your core strong. CAMPUS LIFE, p. 9

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#### Starting Saturday, Continental passengers will be on United

Continental Airlines signs will vanish from ticket counters and gates in more than 370 airports around the world this weekend, marking another major milestone in the company's merger with

Airport workers will begin removing all Continental branding on Friday evening, and starting Saturday passengers booked on either airline will fly on a single carrier, United, for the first time since the merger became official more than a year ago.

"It is a huge milestone," said Bill Swelbar, a research engineer with the Massachusetts Institute of Technology's International Center for Air Transportation.

The move corresponds with the merged airlines' shift to a single reservation system, which officials say should relieve customer services hassles fliers have experienced since the corporate merger in October 2010.

-Kiah Collier, Houston Chronicle

#### Romney parries rivals with his own attacks

When Gov. Rick Perry began rising in the polls, Mitt Romney was ready with a potent debate-night assault: Under Perry, illegal immigrants in Texas received a \$100,000 tuition break.

As Newt Gingrich surged, the Romney campaign dispatched colleagues of Gingrich, a former House speaker, to ridicule him as "narcissistic" and "erratic" in conference calls that required a sardonic pass code: "Newt Gingrich is an unreliable leader."

And with Rick Santorum persisting as a threat as 10 states prepare to vote Tuesday, Romney unleashed an ad in Ohio on Thursday mocking him as an unprincipled flip-flopper.

The Romney campaign's shortcomings have been on vivid display in recent weeks, from verbal stumbles to a failure to stir the passions of the Republican base.

But even his battered rivals acknowledge that Romney is proving unusually adept at defining, diminishing and disqualifying a serial cast of challengers through relentless attacks.

His campaign has deployed every tactic in the negative-campaign playbook. It has issued Twitter messages poking fun at Gingrich's penchant for rhetorical excess (with the hashtag #grandiosenewt). It created digital slogans and a letterhead disparaging Santorum's long career in government ("Rick Went to Washington," they read, "and he never came back."). And it benefited from the advertising onslaught unleashed against Romney's rivals by a super PAC backing him.

–Michael Barbaro and Jeremy W. Peters, The New York Times

#### Israel plans interceptor missile test

JERUSALEM — Israel, in an unusual move, announced Thursday that it would soon conduct the first test of an advanced anti-ballistic missile system designed to intercept incoming missiles from enemies like Syria and Iran.

Its departure from the traditional hush-hush approach to such tests is meant, at least in part, to avoid misunderstandings by other countries in the region and by Israelis themselves in the current highly charged atmosphere surrounding Iran's nuclear program. Israel has repeatedly stated that it will not allow Iran to reach nuclear weapons capability and that it retains the option of a military strike against Iran's nuclear facilities as a last resort. Any such action would invite retaliation, including the likelihood of missiles fired at Israel.

With tensions already running high, some analysts have warned of the dangers of a miscalculation. In November, jittery Israelis jammed emergency telephone lines after the country carried out an unannounced test, firing what experts said was a long-range ballistic missile out to sea from an Air Force base just south of Tel Aviv during the morning rush hour.

—Isabel Kershner, The New York Times

# US defendants leave Egypt amid acrimony

By David D. Kirkpatrick and Steven Lee Myers

THE NEW YORK TIMES

CAIRO - Two U.S.-financed nonprofit groups paid about \$4 million in bail on Thursday in order to fly 11 employees out of reach of Egyptian courts in a deal that capped weeks of bruising diplomatic wrangling and set off a new outpouring of anti-American denunciations here.

In the final days, U.S. diplomats were forced to rely on the support of their former foe, the Muslim Brotherhood, as well as implicit threats to hold up International Monetary Fund aid that Egypt desperately needs to avoid an imminent economic collapse.

The United States had already explicitly threatened to end its own \$1.5 billion in annual aid. And even as a chartered plane waited through the day at the Cairo airport on Thursday, its takeoff had remained in doubt amid a growing backlash against the perceived U.S. interference in the Egyptian justice system.

No Egyptian official stepped forward to accept responsibility for releasing the Americans. Instead, judges and prosecutors distanced themselves from the decision and traded accusations of political capitulation and conflict of interest. The Muslim Brotherhood, the Islamist group that now leads Parliament, hedged itself by demanding an investigation into who let the Americans go. Other prominent members of Parliament called it an outrage and demanded public hearings.

Evening television talk shows brimmed with indignation. Even Mohamed ElBaradei, the Nobel Prize-winning former international diplomat and a reliable advocate for such nonprofit groups, called the political interference in the judicial process "a fatal strike to democracy."

The high monetary and political price paid to extract the group, which included six Americans and seven others, underscored the magnitude of the challenge the United States might face to preserve its close ties to perhaps its most important Arab ally through the uncertain transition to democracy after the ouster of President Hosni Mubarak.

The non-Egyptian employees of

the groups had been trapped here for more than a month by a travel ban imposed as part of a politically charged criminal case against a handful of nonprofit groups, including three chartered to teach political organizing and other aspects of democracy. One is the Germanfinanced Konrad Adenauer Foundation, which paid bail to extricate two Germans as well. And two are U.S.-financed organizations with close ties to the congressional leadership: the National Democratic Institute and the International Republican Institute. The Republican group had been headed in Egypt by Sam LaHood, the son of Transportation Secretary Ray LaHood and one of those who left on Thursday's

As a matter of law, all were accused of violating Mubarak-era restrictions requiring a nonprofit to obtain a license from Egyptian security services and forbidding use of foreign financing without official permission - rules that the U.S. organizations and dozens of other advocacy groups had been allowed to break for years.

# 'Grow Italy' reform bill has been watered down, critics say

By Gaia Pianigiani

ROME — The Italian Senate on Thursday approved a set of measures aimed at fostering economic growth, but critics said some proposals had been watered down, a sign of the roadblocks facing Prime Minister Mario Monti as he tries to turn around Italy's stagnant economy.

The Senate voted 237-33 in favor of the "Grow Italy" bill, paving the way for passage in the lower house of Parliament before the end of the month. Monti's government had to resort to a confidence vote on the measures so they would not be thwarted by the nearly 1,700 amendments proposed by senators.

Monti came to office in November to lead a technocratic government, and he proclaimed the need to raise revenues and reduce the red tape and other bureaucratic barriers to growth that have been jealously guarded by Italy's powerful special interests over the generations. Immediately, a legion of doubters sprang up, convinced that the special interests would defeat Monti's team just as surely as they had outlasted and outmaneuvered other would-be reformers in the

No serious observer doubts the need for something like the "Grow Italy" bill, which was announced in January. It is intended to invigorate an economy that the Bank of Italy has said will shrink by 1.5 percent this year. The International Monetary Fund has forecast that it will contract by 2.2 percent.

The bill aims at increasing competition in a variety of sectors, including those controlled by professional guilds like lawyers, notaries and pharmacists. But under intense pressure from parties supporting the government, Monti backed down and scaled back, among others, the number of new pharmacy licenses. After taxi drivers staged wildcat strikes that paralyzed Rome and other cities, the government agreed to allow individual city mayors, rather than a national transport authority, to determine how many taxi licenses

Lawyers, notaries and others also fought back, at one point appearing en masse in the Senate, to dissuade lawmakers from limiting their privileges.

Experts lamented that the government could have done more in the first place. "What they should have abolished is the principle of the closed professions, and that was not touched by these measures," said Tito Boeri, a professor of economics at Bocconi University in Milan, where Monti was the president until being appointed prime minister. "Why does the number of notaries need to be set by a law? It certainly does not spur competition."

**WEATHER** 

#### Nasty weather in store for this weekend; later, temperatures will rise

By Austin DiOrio STAFF METEOROLOGIST

All the mixed weather has now moved out of the region; today looks to be a very typical Cambridge winter day — cold with mostly cloudy skies. Even though the storms of Wednesday and Thursday have moved off into the Atlantic, there is more wet weather ahead for Massachusetts.

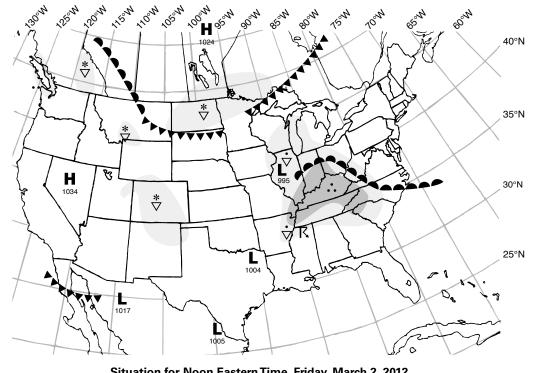
Beginning Friday evening, a warm front will move in from the southwest and bring

with it warmer temperatures and mixed precipitation. This mixed precipitation will quickly change to rain Friday night and temperatures will skyrocket to 50°F on Saturday afternoon. The rain should come to an end Saturday evening.

Behind this system will be seasonably cold air. Although Sunday should get into the mid 40s, Monday will struggle to get much above the freezing point. This cold weather will not persist, and temperatures should rise during next week.

#### **Extended Forecast**

Today: Partly sunny. High 36°F (2°C). Tonight: Mixed precipitation. Low 40°F (4°C). Tomorrow: Morning rain showers. High 50°F (10°C). Sunday: Partly cloudy. High 46°F (8°C). Monday: Partly sunny. High 35°F (2°C).



#### Situation for Noon Eastern Time, Friday, March 2, 2012

Precipitation Symbols Other Symbols Weather Fronts  $\dot{\bigtriangledown}$ Thunderstorn \* OO Haze \*\* Moderate Compiled by MIT

# Syrian military routs rebels in stronghold

By Neil MacFarquhar

THE NEW YORK TIMES

BEIRUT — The Syrian Army overwhelmed the main rebel stronghold in the embattled city of Homs on Thursday, setting the stage for its elite soldiers to turn their attention — and superior firepower — to other insurgent redoubts farther north, despite the increasing international pressure for a cease-fire and humanitarian access.

In announcing their "tactical withdrawal" from the Baba Amr neighborhood in Homs after enduring a pounding by artillery, tank and sniper fire for nearly a month, the rebel Revolutionary Brigades of Baba Amr said in statement that they were heavily outgunned and unable to justify keeping thousands of civilians marooned under dire conditions. In a quarter where most buildings are pockmarked by shell blasts, residents lacked food, medicine, water and electricity and were cut off from the outside world.

The retreat was a significant victory for President Bashar Assad,

as his troops hurry to put down an armed insurgency before international pressure grows so great, or the cohesion of the armed forces breaks down, under the relentless pressure of a nearly year-old uprising. The Syrian government lacks sufficient elite troops to subdue all rebellious cities at once, hence its strategy has been to regain control of one hotspot at a time while pushing its own proposals for limited political change.

But it remains a race against exhaustion, defections and diminished resources.

The Syrian military "is not strong enough to fight in the whole country, but it is strong enough to fight civilians and defectors with light weapons," said Akil Hashem, a retired Syrian general who has advised the Syrian National Council, the umbrella opposition group. "They don't have enough troops to deal with all these uprisings at the same time, so they go from one to one to one."

With the apparent victory in Homs, the Syrian military is expected to step up its assault on Hama, farther north, and beyond that try to tame Idlib province, where many towns and large swaths of the countryside have declared themselves governmentfree zones

Yet international demands for a cease-fire intensify almost daily. Even Russia and China, which have repeatedly blocked international action on Syria, voted Thursday for a U.N. Security Council statement demanding immediate humanitarian access. In Geneva, the U.N. Human Rights Council also called on the government to permit humanitarian aid into besieged areas.

The International Committee of the Red Cross said the Syrian government granted it permission to enter Baba Amr. Despite that, opposition supporters harbored a gnawing fear about possible reprisals in Homs, with gunfire still crackling there and sketchy reports of raids and arrests emerging. Activists said that they had been planning their retreat for days, with scores of residents led to safety before the withdrawal was announced.

# Greek crisis might test the value of swaps

By Peter Eavis

THE NEW YORK TIMES

The restructuring of Greece's debt that is scheduled to start next week may well demonstrate how effective credit-default swaps are.

These financial instruments, which played a major role in both the 2008 financial crisis and in the European debt crisis, are meant to pay out if a company or country defaults. But the twists and turns over Greece's debt are revealing their potential limitations for investors who hope the swaps will protect them against losses if Greece defaults.

On Thursday, the International Swaps and Derivatives Association, the industry body that decides whether swaps should pay out, said that Greece's proposed debt exchange did not currently activate swaps linked to the country's debt. But the association added that the swaps could activate at a later date

The body's decision reignites the

debate over the usefulness of the default swaps. If Greece had simply stopped paying interest or principal on its bonds, the swaps would have paid out. European policy makers, however, decided last year to try to use a voluntary debt exchange for Greece as a way to avoid setting off the swaps. The maneuver was a brusque reminder for investors that there are ways to circumvent the conditions of credit-default swaps.

"If a sovereign, and those trying to rescue it, tiptoe around the periphery to avoid triggering the CDS, it may impair the effectiveness of the CDS as a risk management tool," said Bruce Bennett, a partner at the law firm Covington & Burling.

If the Greek debt exchange damages the reputation of credit-default swaps, banks and other investors that make heavy use of them for protection from losses may have to consider other strategies.

And it would add fuel to the political fire over the swaps and speculators. Some European politicians contend that the swaps destabilize financial markets and encourage investors to mount speculative attacks on government debt. European officials have even taken the step of setting up their own version of credit protection, which will be offered by the European Financial Stability Facility, a government-backed rescue fund.

More than \$70 billion of default swaps exist on Greek government debt. After subtracting swaps that pay out on a default from those that get paid, the net amount is \$3.25 billion. But the small net number masks how much is at stake if the swaps do not behave after Greece's debt exchange as investors planned.

One of the decisions of the swaps association on Thursday underscored how swaps can be disconnected from actions that harm investors' economic interests. As part of the Greek debt deal, the European Central Bank will be shielded against losses on the Greek bonds it holds.

# Europe jobless rate grows; leaders address austerity effects

By Paul Geitner and Stephen Castle

THE NEW YORK TIMES

BRUSSELS — At their first summit meeting in recent memory at which financial markets were not baying at the door, European leaders on Thursday sought to show they could confront the social cost of fighting the sovereign debt crisis, whose severity was underlined by new jobless figures that hit a euroera high.

The infusion of some 1 trillion euros (\$1.3 trillion) into eurozone banks in recent months by the European Central Bank and a provisional agreement on a second package of loans for Greece have gone a long way toward easing fears of an imminent financial crisis or even the disintegration of the common currency itself

Final agreement on the bailout, however, was delayed as finance ministers waited to see if a related restructuring of Greek debts to private investors succeeded and if Athens fulfilled all the conditions it had agreed to.

In the meantime, with more than one in 10 workers in Europe out of a job and government budget-cutting intensifying the economic slow-down, leaders were looking for ways to reconcile the urgent need to stimulate growth with the stepped-up budget discipline required under a new "fiscal compact," which was expected to be approved Friday.

Yet that agreement, negotiated by 25 countries at the request of Germany, was under pressure even before it had been signed as evidence mounted that a recession forecast for the eurozone this year was already worsening public finances as well as increasing unemployment.

The jobless rate in the 17 eurozone countries rose in January to 10.7 percent, from 10.6 percent in December. It reached the highest level since 1999, when the euro was introduced,

according to Eurostat, the European Union's statistics agency. Flagging economies like Italy and Greece were responsible for much of the increase. For all 27 European Union countries, the rate ticked up to 10.1 percent in January from 10.0 percent in December.

European countries nonetheless diverged widely: Spain again topped the list with a 23.3 percent jobless rate, followed by Greece, at 19.9 percent in November. That compared with 4 percent unemployment in Austria and 5 percent in the Netherlands.

Even the Netherlands, which has taken a hawkish stance on budget discipline, announced Thursday that it was losing ground. Next year's budget shortfall will be 4.5 percent of GDP, matching this year's expected outcome, despite cuts already made that are intended to bring it down to the goal of 3 percent, according to the government planning

#### Palin rebuts movie portrayal

Sarah Palin stepped up her war against the HBO movie "Game Change" by releasing a video yesterday that highlights praise from Republican strategists who are portrayed in the film as some of her toughest critics.

The movie, which premieres March 10, is based on the book of the same name by Mark Halperin of Time magazine and John Heilemann of New York magazine. Both the book and the movie suggest that as the Republican vice presidential nominee in 2008, Palin knew little basic history or public policy, and that as the campaign wore on, she became difficult to handle.

Much of the film focuses on Steve Schmidt, the chief strategist for Sen. John McCain, the presidential nominee, and Nicolle Wallace, who was selected by McCain to serve as Palin's top aide. In the film, they grow increasingly concerned about Palin and her abilities.

But in the video released by Palin's political action committee, Schmidt and Wallace are repeatedly shown during the height of the campaign speaking glowingly about Palin.

Wallace calls Palin "a feisty, strong, tough and straight-talking governor."

Schmidt says: "Her focus was extraordinary. She was working 15, 16 hours a day. We were very pleased with the results."

—Michael D. Shear, The New York Times

# Google's new data-sharing policy, and how to deflect it

Google started its unified privacy policy yesterday.

The company has been telling users of its services — search, YouTube, Gmail, Google Maps and Google Docs, among others — that information it collects about users will be compiled in a single dossier for its use.

What does that mean to users and what should they do about it? Until Thursday, a record of a user's activity on Google's search engine was kept apart from the record of that user's activity on other Google properties.

Google's search engine may have known a user was looking up sites about Jamaica, but it was not giving that information to YouTube or Google Maps, just as those sites were not sharing that user's activity with Google Search.

Now it is. That is the big change. If you have a Google Account, your activity on one Google property is available to other Google properties.

Some people do not like this, because Google's search engine is used for lots of activities, some of them personal, financial or medical.

If you would rather not have all of your Google-related activity sloshing around the "Don't Be Evil" empire, remedies are available. Some are simple, others laborious:

You can delete your search history and prevent Google from using it for advertising purposes in the future. To do this, sign in to your Google account and go to *google.com/history*.

—Sam Grobart, The New York Times

#### Those with Putin ties grow rich

ST. PETERSBURG, Russia — Arkady R. Rotenberg, a former judo coach, is now a billionaire industrialist, having made a fortune selling pipe to the state-owned gas monopoly, Gazprom.

Yuri V. Kovalchuk owned a minority stake in a small bank in St. Petersburg that won control of a number of Gazprom subsidiaries. He is now worth \$1.5 billion.

Gennady N. Timchenko, once the little-known sales manager of a local oil refinery, is now one of the world's richest men, co-owner of a commodity trading company that moves about \$70 billion of crude oil a year, much of it through major contracts with Rosneft, the Russian national oil company.

What these men share, besides staggering wealth and roots in St. Petersburg, is a connection to Prime Minister Vladimir V. Putin, who is poised to win a new six-year term as president in elections on Sunday. The three billionaires are members of a close circle of friends, relatives, associates, colleagues from the security services and long-time advisers who have grown fabulously wealthy during Putin's 12 years as Russia's paramount leader.

Critics say these relationships are evidence of deeply entrenched corruption, which they view as essentially government-sanctioned theft invariably connected to Russia's abundant natural resources: gas, oil, minerals. This has become a persistent grievance of demonstrators who have staged four large street protests since December and are promising more after the election.

Putin has repeatedly denied any involvement in the enrichment of these and other acquaintances, and he has forcefully dismissed assertions made by his political opponents that he himself is a secret beneficiary of these enterprises and has amassed tens of billions of dollars in bank accounts outside Russia.

—Andrew E. Kramer and David M. Herszenhorn, The New York Times

# Portugal rejects extradition of US murderer

Portugal will not extradite a fugitive U.S. murderer and hijacker who was seized last year near Lisbon, his Portuguese lawyer said Thursday, after a final deadline passed last week for the United States to file an appeal.

U.S. officials had sought to have the fugitive, George Wright, returned to finish a 15- to 30-year murder sentence that he was serving when he escaped from prison in 1970, and to face charges for a hijacking two years later. Wright has admitted commandeering a Delta Air Lines DC-8 with several others and demanding a \$1 million ransom.

Wright's lawyer, Manuel Luis Ferreira, said Thursday that Portuguese judicial officials had told him the case was effectively over. He said the United States had "exhausted every appeal here in the Portuguese system" after missing a deadline for taking the case to a constitutional court last week.

On Wednesday, a senior judge of that tribunal, Luis Maria Vaz das Neves, told The Associated Press, "The case is now closed." He said that for the United States to pursue the case further, it would have to find other grounds for having Wright sent back.

—James Barron, The New York Times



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The Tech (ISSN 0148-9607) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January, and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are \$50.00 per year (third class). POSTMASTER: Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. TELEPHONE: Editorial: (617) 253-1541. Business: (617) 258-8324. Facsimile: (617) 258-8226. Advertising, subscription and propesting rates available. Entire contents © 2012. subscription, and typesetting rates available. Entire contents © 2012
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#### LETTERS TO THE EDITOR

#### Freedom of speech is not freedom to commit crimes

What Haldun Anil has voiced in his Feb. 10 article, called "La Révolution Française," is not original and simply mimics Turkish officials in their continued efforts of genocide denial. The Turkish State has changed its tactics over the years and went through an evolution from complete denial of any wrongdoing to acknowledging that some killings did occur; but discussing those crimes should be left to historians - otherwise liberty everywhere will be in danger (ironically enough, if Turkish historians do dare to talk about Armenian Genocide they get persecuted by Penal Code 306 in Turkish constitution or get assassinated by Turkish nationalists). This is the mainstream Turkish propaganda of today and it seems Haldun Anil is following in these footsteps.

Interestingly enough, the freedom of speech of thousands of jailed and persecuted Turkish journalists, writers, historians, human rights activists, and oppressed minorities (well-documented by "Reporters Without Borders" and "Human Rights Watch") in his native Turkey doesn't concern Haldun; his desire for liberty seems to exist only when it comes to someone else condemning the Armenian Genocide and

Turkish propaganda's clumsy efforts of presenting Armenian Genocide as a somewhat controversial topic would have been amusing, if the matter itself wasn't so tragic — an annihilation of an entire population with overwhelming amount of evidence.

Turkish propaganda's further efforts of portraying Armenian Genocide as merely a historical debate which should be left

to historians is offensive and deliberately misleading. An overwhelming number of genocide scholars and historians have already weighed in[\*], affirming and condemning the Armenian Genocide years ago. They have also deducted that denial is the last and final stage of any genocide and Turkey is exercising it with passion – both in Turkey and by pressuring other countries.

Germany had the courage of accepting the undeniable fact of Jewish Holocaust. Meanwhile Turkey has demonstrated not only lack of such courage or remorse, but also in recent years went further and started prosecuting journalists, historians, and social activists (in some cases even jailing or assassinating them) for even mentioning Armenian Genocide in an unparalleled effort on cracking down on freedom of speech in 21st century.

The truth is that Armenian Genocide is neither a topic that historians are debating (this "debate" was concluded in 1943, when the author of the word "genocide" Raphael Lemkin said he invented the word in order to describe unprecedented tragedies that befell Armenians in 1915-1923 and Jews during World War II, so by definition genocide is what happened to Armenians in Ottoman Turkey and Jews in Nazi Germany) nor a controversy outside of Turkey, where there is a law criminalizing even talking about Genocide and Turkish intellectual elite has suffered greatly due to this.

Turkish historian Taner Akcam (now a professor in Clark University), Turkish writer Orhan Pamuk (a winner of Noble Prize for literature), "Agos" newspaper editor Hrant Dink (assassinated by Turkish Nationalists) and many more have fallen victim to the most outrageous freedom of speech violation in Turkey — article 306 in Turkish Penal Code that criminalizes any mention of the Genocide.

When it comes to freedom of speech in France and many other countries who have officially affirmed and condemned Armenian Genocide despite pressure from Turkey [†], it is important to remember that in most democratic countries there are categories excluded from free speech, like "hate speech," "defamation," "fighting words," and "intentional infliction of emotional distress". Even in the U.S., where freedom of speech is protected by very revered First Amendment of U.S. Constitution, our forefathers excluded those categories from it.

Freedom of speech, thought and expression are cornerstones for any democratic society, however when it is abused in order to spread fascism, racism, discrimination, defamation, and hate, democratic societies step up to provide protection for the victims. That's exactly what has happened in U.S. and France. That's exactly what's missing in Turkey.

By Nerses Zurabyan and Aren Mamikonyan MIT Armenian Society

(\*)Examples of scholarly and human rights organizations condemning Armenian Genocide include the International Association of Genocide Scholars, Institute on the Holocaust and Genocide in Jerusalem, Institute of Holocaust in Washington D.C, United Nations' Sub-Commission on Prevention of Discrimination and Protection of Minorities, World Council of Churches, International Center for Transitional Justice and many more.

(†) Examples of countries affirming and condemning Armenian Genocide in Ottoman Turkey include France, Canada, 43 US States, Germany, Sweden, Belgium, Russian Federation, European Union Parliament, Council of Europe, Vatican City, Argentina, Netherlands, Switzerland, Greece, Italy, Poland and many more.

#### **GUEST COLUMN**

# Saving Alcator C-Mod

#### Cancellation of MIT Fusion Lab is a blow to worldwide energy research

By Derek Sutherland

The MIT fusion experiment Alcator C-Mod has been slated for cancellation in the presidential budget request for fiscal year 2013, a cut of nearly \$18 million to the MIT Plasma Science and Fusion Center (PSFC) to be enacted in September 2012. The shuttering of this single largest experiment at MIT will be devastating to the research of many of our professional scientists, upwards of 30 graduate students and dozens of undergraduate students at MIT. Luckily, this budget must still be passed by Congress to go into effect, and we need your help now to reverse this decision.

Fusion energy, the power of our sun and other stars, is a promising alternative form of nuclear energy that has the motivating benefits of a nearly unlimited fuel supply in our oceans, zero carbon pollution, and no long-lived radioactive byproducts. Fusion is the energy of our future, and the scientists, engineers and technicians at the PSFC are actively bringing this clean, abundant, secure energy future that much closer to the present. The main fusion energy experiment at MIT, Alcator C-Mod, is one of the major U.S. fusion experiments in operation today. C-Mod is a high magnetic field, compact, high-performance tokamak. Much of current fusion research is dedicated to the development of ITER, a large tokamak that is currently under construction in France that will demonstrate a predominately self-heated fusion reactor system, which is the next step on the path towards an electricity-producing fusion reactor. C-Mod is able to operate with an ensemble of particular conditions that are critical to study for the success of ITER,

such as high plasma pressures, which no other tokamak in operation can achieve. Also, necessary current drive methods have been pioneered on C-Mod, such as lower-hybrid current drive, which is very efficient when compared to other methods. To cancel C-Mod is to threaten the success of ITER and ultimately the global fusion reactor initiative as a whole, as well as to remove a critical part of the domestic tokamak fusion research collaboration consisting of three tokamaks, NSTX at Princeton Plasma Physics Lab, DIII-D at General Atomics, and C-Mod here at MIT.

C-Mod is currently the largest single experiment at MIT, and supports a myriad of different types of personnel: approximately 30 graduate students, 40 undergraduates in the last three years through

Sutherland, Page 5

#### CORRECTIONS

A World and Nation headline published on Feb. 28 incorsions stated that Brandon D. Briscoe '12 had received "several eases nower after political. crisis." It should instead be "Iraq's prime minister."

An article published on Feb. 24 regarding diversity discus-

statements of support from other students." Briscoe actually said that he had received "many statements of support from both students and alumni."

#### **OPINION POLICY**

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#### **GUEST COLUMN**

# Enough

#### Questions that need to be addressed to prevent further suicides

By Clio Andris

(As a preface to this letter, I make no assumptions about accidental or intentional nature of the sad passing of Brian G. Anderson '13, and stand with the MIT community in sending our thoughts and wishes to his family and friends. Yet, I believe his death, as the most recent loss of a student on campus, brings to light a very concerning issue on campus.)

A number of people have spoken about the recent tragic student losses at MIT. Yet, MIT needs also to realize that for every suicide, there's a magnitude of students who consider the option daily. Getting to the root of depression and stopping loss of life is not an easy problem but trust me, crazier, more idealistic ideas have been accomplished on this campus.

I believe that depression and suicidal tendencies are complex issues at MIT. MIT students are very independent, self-pushing, and perfectiondriven — which is a dangerous combination for depression. In addition, the "do what it takes to get it done" mentality is also dangerous for suicide. Moreover, MIT students are rational in the most mechanical way — if they see themselves as the weakest part of the system, then they will further remove themselves. These feelings manifest themselves as someone loses healthy perspective on life. This "skewed" thinking becomes exacerbated with (and is partly the cause of) an increasing loss of connection to people, yielding fewer rewarding conversations; friendships and feelings of closeness with trusted friends, professors, and family; and creating a system of vicious cycles. Also, as we know, the signs of depression and end-of-life decisions are not always visible to one's friends and family, especially when the affected friend has "perfectionist" or "overachieving" characteristics. It's a slippery slope that is often faced alone.

It's clear that MIT needs to forge (or convolve, if you will) a stronger net to support brilliance at all stages of development — NOT pose a sink-orswim environment. What we have in place — S3, Mental Health, the together.mit.edu signs that are very encouraging (but only point us in a loop back to S<sup>3</sup>), etc. — is not working. (S<sup>3</sup>, as Shin Nee Wong aptly described in "Getting better by leaving the Institute," on Feb. 28, 2012, is very administrative and often takes three weeks to schedule a meeting.)

MIT needs to create a task force on what is making students depressed, over-anxious, and ready to end their lives. Record what panics or overwhelming thoughts our students are having and address these on the whole. (MIT is great at task force projects; for an example, see MIT's active role in changing in number of female professors in the past 20 years.)

This task force should tell us:

How many students are on antidepressants or other medication prescribed by psychologists at this school? What are the elements of the MIT experience that seem to turn highly-sought after young thinkers into "irrational actors"? Is it the intense academic load or something more? What is the progression of personal events that is leading individuals to suicide at MIT? Can students selfdiagnose themselves as having a problem? Or do they simply think they are broken and a failure? Is there a stigma attached with seeking help for suicidal thoughts? Is serious help socially, physically, mentally accessible? Why are MIT's thoughtful, dedicated services somehow not an option for some students? What other options can we provide? Does MIT Medical have the resources to cover the needs of suicidal or potentially suicidal students? Calling MIT Medical in a polite way often gets us a meeting in a doctor's next available slot, which is often close to two weeks into the future. For obvious reasons, this is not good enough, and can easily be viewed as a rejection of a call

In addition, MIT should:

Hire more seasoned professional experts to work at Mental Health. When students call, ask the students how they are doing, and directly confront them with the option of being seen immediately. Give the administration the responsibility of letting students know that other students often have the same difficult thoughts about school and life at MIT, and should foster programs that prevent students from becoming disconnected from one another. Get our alumni to reach out to the students — the supply is manifold. Adopt the very inspirational, and right-on mantra "It gets better" from the GLBTQ community. As echoed by Wong in the Feb. 28 guest column: No one knows pressure like someone who has been through the same system. Report on student stories about depression and suicide at MIT. Personally, I have heard many stories from my own friends about this issue, and know more through my own experiences.

How can we turn this into something

The people of the MIT community are our real endowment, and losing a single member for the frustrating combination of very serious but very fixable reasons should be avoided. It's a wellknown adage that "it takes a village to raise a child," and it is time to put more funding towards making the MIT community village better at rais-

> Clio Andris PhD '11 is a postdoc in the Department of Urban Studies and Planning.

**GUEST COLUMN** 

# S<sup>3</sup> is a valuable guide and resource

Honest help for students

By Samantha Marquart

There is no doubt in anyone's mind that MIT is a difficult place. The challenges students face, whether academic or social, are difficult to handle even amidst the best mental health states. We enter the Institute as the top students from our hometowns with ambitions of maintaining this status by being the best in our classes and extracurricular activities. We have not failed until we

It is precisely for this reason why Student Support Services (S<sup>3</sup>) exists. We need guidance in our time of need. S3 is honest and sincere, providing students with a resource from which to navigate the Institute — be it a listening ear, letter to a professor, referral to mental health, or a myriad of other resources. S<sup>3</sup> cannot solve our problems for us — it can only give us tools and support with which we can overcome our challenges. S3 cannot solve every issue, nor can it seek out every student at risk; rather, it should be seen as a resource to empower students to resolve the challenges

S<sup>3</sup> is honest and sincere, providing students with a resource from which to navigate the Institute — be it a listening ear, letter to a professor, referral to mental health, or a myriad of other resources. S<sup>3</sup> cannot solve our problems for us — it can only give us tools and support with which we can overcome our challenges.

I truly believe that I would not have made it through my undergraduate career if I did not have the guidance of the S<sup>3</sup> office. I too thought about leaving MIT, having faced emotional and medical trials at the Institute. While my pre—MIT self would have never asked for help, I came to realize that life is more important than each problem set or test. I learned that I can — and should — fail.  $S^3$  did not solve my problems for me — they helped me to navigate my way through fixing them myself. For this, I am truly grateful.

Years from now, I know I will continue to look back at MIT as the place where I became me — not because of the work I did in the classroom, but for the person it helped me to become. S<sup>3</sup> forced me to face my problems head on, guiding me in the directions that ultimately shaped me as a student and a leader. I owe my life to S3 in more ways than one, and I thank them for everything they have done for me and others like me.

While I too grieve the losses our community has faced this year, I urge you not to point blame at the support systems we have in place. Rather, I ask you to take a stronger role in your living communities, classrooms, and activities — to care more for one another and help those in need. But most of all, I urge you to realize that it's ok to fail, for only when we hit our bottom and ask for help can we rise to face the good coming our way.

Samantha Marquart graduated in the class of 2011.

#### Alcator C-Mod is vital to the MIT Fusion Lab

#### Losing it will shutter jobs at MIT and ruin research projects

Sutherland, from Page 4

the undergraduate research opportunities program (UROP), 120 directly employed individuals, and nearly 300 indirectly employed personnel throughout the United States. The effect of closing C-Mod is not only a threat to scientific collaboration by eliminating the most extensively connected experiment to various other fusion projects in the world, but is also a threat to the leadership of our professional scientists, graduate, and undergraduate students in this global field. In addition, over 40 years of technical experience that has been developed here at MIT will be lost while these committed, high-tech technicians are laid off from jobs they have held honorably for many years. Thus, the cancellation of C-Mod will result in the loss of hundreds of MIT jobs, and with them the loss of the irreplaceable expertise that has been developed over decades.

In addition to the injurious effect of shuttering hundreds of jobs here at MIT, a cancellation of C-Mod will be effectively cripple U.S. student involvement in ITER through the elimination of the main training ground in the United States for students interested in fusion research and development. Cutting edge research on the C-Mod project has led to hundreds of ground-

but this cut will require current graduate percent of the known universe is in a plas- a link to a petition on change.org under students to either be sent to other institutions to complete their PhD research, or be forced to finish with a Master's degree. The immediate result of this cancellation would result in an exodus of some of the brightest future leaders in the field of fusion energy, and most likely many of our professionals who are the current leaders. Also, as I have personally found during my undergraduate experience, many undergraduate research projects become the foundation for PhD work, and the continued great beginnings in the field of fusion energy during undergraduate careers will be eliminated if this proposed budget is passed. With these combined detrimental effects on both graduate and undergraduate research here at MIT, we can expect MIT to have a lesser role in the global fusion energy initiative and the United States will not receive an appreciable return on investment in ITER by eliminating one of the main, domestic experiments supporting this burning plasma experiment currently under construction.

I'm sure many of us remember our science classes during our primary education, learning about the phases of matter, solid, liquid, gas, and sometimes plasma, but we really don't need to worry about the ma state. I feel like the 99 percent should occupy a bit more of our study than the one percent. C-Mod hosts the largest public education and outreach program of any U.S. tokamak, with nearly 1,300 people visiting C-Mod last year alone. Also, C-Mod's "Mr. Magnet" Program has brought fusion and plasma physics to thousands of students of all ages through on-site C-Mod tours and classroom visits, with nearly 3,000 students a year participating! The MIT PSFC is not only focused on furthering the field of fusion energy, but has a strong focus on student involvement and increasing the public's awareness and understanding of important issues concerning science and energy and how fusion can play a major role in securing a carbon-free, safe, and secure energy future.

With our concerns presented, we call upon the MIT community to help us reverse this proposed budget cut to C-Mod, both to ensure a fusion energy future and to maintain MIT's status in this cuttingedge field as a leader rather than a follower. Scientists at the PSFC and other fusion facilities have created a website, http:// www.fusionfuture.org that provides additional information about C-Mod's contributions to science, example letters to send

breaking theses over the past decades, last one, right? Considering upwards of 99 to your representatives in Congress, and the "Important Links" side column the quickest way to have your voice heard. Also, please visit and join our Facebook group, Save Alcator C-Mod. On March 7, C-Mod will be open to the MIT community from 1 p.m. to 3 p.m. with tours departing every 30 minutes from NW17-218. If you would like to see this amazing experiment firsthand, please come visit us during open house!

As Stewart Prager of the Princetion Plasma Physics Laboratory has said in a recent interview, "We have a clear choice before us: The United States can either design and build fusion energy plants or we can buy them from Asia and Europe." Though Asia and Europe are important collaborators in the field of fusion energy, I believe MIT should continue leading the effort to ensure the United States is a leader in this field. We owe our support to the committed professionals, and graduate and undergraduate students at the PSFC to continue bringing this clean, abundant, more secure energy future for our nation and the rest of the world that much closer

> Derek Sutherland is a senior in the  $Department\ of\ Nuclear\ Science\ \&$ Engineering

# Baker to serve as head of Department of Biology

#### Plans on building communication and networks between the biology related sciences

Biology head, from Page 1

dean, and I feel very fortunate that my career has been supported by some great department heads in the past. I've been here almost 20 years, and over that time, I've really been helped by the great environment created by previous department heads; I hope I can give back some effort to the department that will help the careers of others.

TT: What are some of your goals as department head?

TB: The department is strong and vibrant, so I think we want to continue to be a cutting edge institution for biological research, as well as a great place for teaching and learning at the undergraduate and graduate level.

We want to maintain that, but biology is a fast-moving field, so we have to make sure we're reflecting the modern, most up-to-date investigations and approaches. For example, some of the technology that is exceedingly commonplace today wasn't even used at all five years ago, or was just starting to be used. Great ways to keep renewing our department is by hiring young faculty, and by creating and refreshing the courses in order to keep the biology department the world-class place that it is.

In addition, it is very important to continue the department's efforts toward building communication and networks between the biology-related sciences across the Institute. I want to first educate myself in more detail about what's going on, and then help figure out how we can all work together in a community.

*TT:* So on the interdisciplinary note, what are your views on the new Course 6-7 created last year?

TB: I was actually talking to one of the faculty members this week about making sure we'd have the appropriate type of courses that would be of interest to the students that are going to be coming down the pipeline in that major, but I am still learning.

My job in the department directly pre-

This space donated by The Tech

vious to this one was as co-director of the PhD program, so I've been less involved in the undergraduate program recently. But seven years ago, I was associate head of the department, so I was very involved in teaching and course placements, the curriculum, etc. I haven't gotten everybody's opinion on the nitty-gritty of how 6-7 is going, but it's definitely on our radar screen. We want to think of upper-division electives that will be appropriate for people with this interest profile. It's an area that will continue to strengthen our department.

#### You bring an idea to someone, and they're like, 'Oh yeah, we can do that'

*TT:* What has been your favorite part of being at MIT, biology or otherwise?

TB: The swimming pool! (Laughs) But really, I love the can-do attitude people have around here. You bring an idea to someone, and they're like, "Oh yeah, we can do that!"

And for my own research, it's been really great to be at a school that's a science and technology school. I've had a lot of interactions with chemistry, biological engineering, and other departments, collaborating and helping each other out with different experiments and techniques. Sometimes you'll have an idea, and two days later someone's built something or figured out how to synthesize the molecule you need.

There's a real love of problem-solving and curiosity — in our case — about how life works. That's part of the culture that I really like.

*TT:* Have you had to overcome hurdles or roadblocks on your career path?

TB: I'm dyslexic, so as an undergraduate, as a high school student, I had significant hurdles. There were courses that were required that I wasn't getting the greatest grades in. I was very bad at foreign language,

which was a requirement for a basic science major in many universities, so I couldn't be a molecular biology major. I took Spanish three times and I had to drop, and I took French twice and I had to drop, so I ended up majoring in biochemistry in the school of agriculture.

I got support from people, but this was before there was so much knowledge about learning disabilities. I had accommodations in high school, but when I got to college, there were none. But I've had a very, very fortunate career. I always just keep trying, and things have gone very well. I was a successful graduate student at Stanford, then a successful postdoc at the NIH, and then I came here.

*TT*: What triggered your interest in biology?

TB: I was a good science student in junior high, or whenever we started having labs and things like that. I was noticeably good at it, which was pretty cool. We had a lot of life science books at home that we just spent a lot of time reading. I was raised by a single mother — my father died when I was six years old, so my brother and my sister and I hung out alone a lot (laughs), so we read all these books and watched National Geographic on TV. That National Geographic theme song still gets my heart pumping, which makes my kids think I'm nuts — I mean, they like it too! But they're like, "Mom, you're a little overly crazy about this!"

But I think it was when I went to college that my interest really grew. I was planning on majoring in physical therapy, and the first year of the major was a basic science curriculum. I really liked the biology course, and I remember learning certain things and talking about them all the time to my friends. It clearly sparked my interest.

I also had a job when I was a college sophomore where I was initially working as a babysitter for two scientists — one was a course instructor and one had a lab. They got a live-in babysitter, and so they hired me

in their lab, and I was doing stuff like autoclaving pipette tips and washing flasks, and I just kept learning more and more about how research labs work from this experience and meeting graduate students doing research.

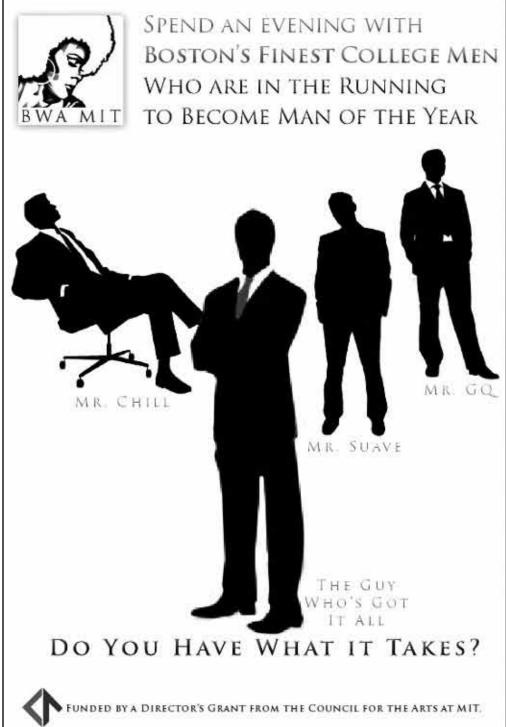
The type of experience that you get from working through things in a research lab versus the type of knowledge that you get from taking classes, they're two different parts of the puzzle, and you need them both. Undergraduate research is essential.

#### I really liked the biology course, and I remember learning certain things and talking about them all the time to my friends.

*TT:* What are you looking forward to most as department head?

TB: In taking on this challenge, what I'm really looking forward to is working with the whole community — the students, the staff, the whole school of science — to help create a good place to do biological research and be leaders in biology education. I'm really looking forward to getting to know and work with the whole community. It has really great growth potential for me, since I think you go through phases of opening your interactions with broader scopes of people, versus focusing down on a specific area of research. So I'm looking forward to an opening phase and looking forward to learning about things that people are working on and thinking about.

It's always extremely difficult to predict what area of biology we should target for future growth in the department, but I don't think there are major holes in our program that we're desperate to fix. I need to talk to all the faculty in the department, and I want to have round table meetings with students and postdocs to hear their ideas, but since we're such a strong department, we're not in need of any huge change in direction.





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# Plans for search committee

#### Committee aims to have next president by summer

SearchComm, from Page 1

start meeting as soon as it is formed. The Chairman would like the search to get started "sooner rather than later," and act with "deliberate haste," but still not sacrifice quality for speed.

It is technically possible for the Executive Committee to nominate candidates that were not suggested by the search committee, and also possible for the full Corporation to vote on an entirely new candidate. But in practice, the search committee's recommendations are the only ones given serious consideration by the Corporation, according to Reed.

Champy, who will chair the search committee, comes in with the experience of a prior presidential search. He is a Corporation life member, author, and big-name business consultant.

#### What does it take to be an MIT president?

What will the search committee do? How does the committee pick MIT's president?

The search committee must look at a diverse array of qualities when considering potential presidents. Academic accomplishments, managerial experience, and executive ability all play a role, according to Reed.

"The key thing you're looking for is somebody who understands MIT, who knows what our basic business is, who has some vision as to where we should be moving and some ability to get us there," he explained.

Reed, personally, says he is interested in a candidate's executive ability. (Reed himself served as Citigroup's CEO and chairman, and chairman of the New York Stock Exchange, before taking the top spot in the MIT Corporation.)

"Tell me two or three things you've done well, two or three things that have not gone well," said Reed. "Tell me how you succeeded and why you failed. I'm much more interested in the 'hows' than the 'whats."

Since the search has not yet officially begun, Reed says he isn't sure exactly what qualities the search committee and the Corporation will be interested in. Some members might consider big-name academic prizes, like the Nobel, to be important for a presidential nominee. Others may be more interested in a strong executive and managerial track record.

Either way, the search committee has a daunting task before them. Last time the committee was formed, it began with a list of about 100 people for president and had to whittle that down to a list of about seven to investigate more closely, according to Reed.

Since MIT's past two presidents – Hockfield and Charles M. Vest – did not have a history at MIT prior to stepping in as president, Reed believes the Corporation might lean towards picking someone with an MIT background.

Reed hopes the search committee will ultimately recommend two or three people "who are acceptable to everybody." His goal is for MIT to have the name of its next president by the summer. Until then, Hockfield will continue to serve.

#### UA, from Page 1

vote for Next House's Alec C. Lai '13), and Michael E. Plasmeier '13 of Baker House (holding a proxy vote for Brian Luque '12).

Still, a majority of Council members present supported passage of the constitution, saying that the proposed amendments were mostly minor and could be changed later if need be. But with 13 votes — two-thirds of the full Council — needed to approve constitutional changes, only nine voted "yes." In a similar manner, passage of the UA Bylaws failed with 12 in favor.

The Council did successfully adopt a new meeting schedule on Tuesday, agreeing to convene once every two weeks — instead of the Senate's traditional weekly schedule - once the constitution is approved. Until then, weekly meetings will continue under the UA's temporary constitution.

Rachel E. Meyer '10's bid for off-campus representative was killed, at least for the time being, on constitutional grounds. According to the temporary constitution, Council representatives cannot be appointed unless they are able to serve full-year terms. Meyer cannot, since she will graduate this spring.

Notably, the Council was not able to tackle its final - and perhaps most important - action item for the evening. After slightly more than an hour of constitutional wrangling, the Council adjourned and agreed to deal with that final item, "Set Common Mission/Vision for Council," next time.

-Ethan A. Solomon

This space donated by The Tech



#### **Solution to Crossword**

From page 9

PARK RUMS SCENE
ARIA ISEE LUXOR
PICTAPART AMEBA
ADHERE SATIRES
KNIT GENTLE
AQUA SNAPE
CURLS SLUNG PAL
MISTOPPORTUNITY
ETA BLOND MASON
ATEUP MANX APPLET DEED
CREASES SAVAGE
RINGS PASTBALLS
EMCEE IDOL

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Massachusetts Institute of Technology Undergraduate Research Journal

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When: By Friday, March 23rd, 2012

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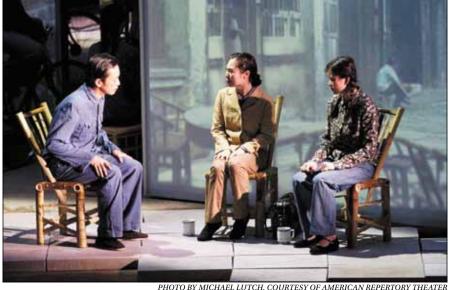
# A study of scarlet Communist ideals and familial duty go head-to-head in Wild Swans

**By Kathryn Dere** ARTS EDITOR

In her stage adaptation of Jung Chang's Wild Swans, Alexandra Wood has crafted a vivid portrait of the political turmoil and uncertainty surrounding Mao Zedong's

rule in China. Chang's memoir, which spans a century of history and covers the lives of three generations of women — her grandmother, her mother, and herself — is a lengthy one, but on the stage, the epic plays out in five acts and less than two

Wild Swans centers on Chang's mother



Orion Lee, Ka-Ling Cheung, and Katie Leung in Wild Swans.

and father, De-Hong (Ka-Ling Cheung) and Shou-Yu (Orion Lee), as they rise in the communist ranks and eventually fall from grace. Shou-Yu's ultimate refusal to sacrifice his idealistic principles and protect his family becomes a major point of conflict throughout the play, and Chang's own character (Harry Potter actress Katie Leung), is still young when she is forced to watch as soldiers command her mother to kneel in broken glass. Yu-Fang (Julyana Soelistyo), the reserved matriarch, bridges the gap between old and new order as she tends to her daughter, reminds her sonin-law of his familial duties, and watches over her granddaughter. Soelistyo, uninhibited by her diminutive stature and limited stage presence, is impossible to

Despite its gripping storyline, however, much of Wild Swans' impact lies in the set design. Featuring video design by Beijing artist Wang Gongxin, the set creates maximum impact out of minimal space and requires the actors to play a very physical part in changing each scene. At one point in time, the field workers vigorously push large quantities of dirt off one end of the stage while white-coated hospital workers make their entrance from the other side of the stage, deliberately sweeping away the Wild Swans

Presented by American Repertory Theater

Directed by Sacha Wares Through March 11, 2012

Harvard Loeb Drama Center

dust. Through this great amount of energy we can sense the masses of other people that Chang's one family represents.

After all, Wild Swans tells more the story of a country and a people than Chang's family alone. The script leaves little room for personal reflection on the part of individuals, but beneath all of the characters simmers a spirit of strength and pain even more collective than their communist ideals. Those 90 minutes may not create characters that we can actually know, but they do create characters that we want to know. It's just enough for us to begin to understand, and that is its power.

After Wild Swans concludes at the A.R.T. on March 11, it will play at the Young Vic in London from April 13 - May 13.

#### **CONCERT REVIEW**

# **Educating ourselves about Lauryn Hill (and her thesis)**

Hill has grown with the times and is still as captivating as ever

By Florence Gallez

In the non-Prince music section of the Purple One's fan site Prince.Org last week, a contributor asked quite a pertinent question about The Miseducation of Lauryn Hill album and its world-renowned female rapper-author:

"Just a curious question, this album was no doubt huge. But I noticed Lauryn Hill doesn't actually have ... many hits. 'Doo-Wop' went number 1, 'Ex Factor' went 21 and 'Everything Is Everything' went to 35. And that is pretty much it. I understand that 'Turn Your Lights Down Low' and 'Sweetest Thing' where huge on R&B radio. And even had some MTV Play, also making it on the hot 100. But what is it about Lauryn Hill that makes her so loved and remembered? I myself adore Miseducation and I adore the

Fugees album. But as big as Lauryn Hill's album was and her name in general she just had so few hits, and only one album. So I am curious what was the hype for the album like? And what do you think it is that makes her have this big legacy?" wrote the skeptical poster under the name of "Gunsnhalen."

A quick reminder: Hill collected five Grammy Awards, including the prized Album of the Year and Best New Artist, for the critically acclaimed 1998 album that launched her solo career following her work with the Fugees. Miseducation has also been a commercial success, with over seven million sales in the U.S. by the end of 2010. Debuting at number one on the Billboard 200 upon its release, Hill's first solo endeavor has been to this day praised for its rich lyrical themes and variety of genres, earning a place among the greatest albums of the 1990s, and potentially the greatest album of all time.

But as the online commentator insinuates, the 14-track album that jumps from old roots reggae to contemporary R&B, and from soul to hip hop and gospel, and to rhythmically delivered spoken poetry that is purely Laurynhillesque, is clearly about quality, not quantity.

After all, Hill has also released only one album since Miseducation - MTV Unplugged No. 2.0 in 2002, so there has been essentially no new material at her occasional live appearances in recent years. At her series of shows in New York in late December 2010, her solo material and genre-setting songs of the wildly successful Fugees album The Score were the pieces de resistance.

So where is the magic remembrance coming from?

I think I found some answers at Hill's

Lauryn Hill **House of Blues** February 23, 2012

concert at Boston's House of Blues last

The show was billed as "Ms. Lauryn Hill Performing music from The Miseducation of Lauryn Hill," but also included songs from other years. The 36-year-old multitalented musician and mother of six showed us why, after so many years, people of all ages and races are still in love with "Killing Me Softly." Her unique stage presence — as natural as if at rehearsal and with dance moves at once rhythmic and fluid - was on full display last Thursday. Through creative

rearrangements of her songs' original versions, she has managed to create a timeless style that is strictly her own.

Fashionably (but not unprecedentedly) late by one hour and a half on the announced schedule, Hill took the stage in long, large flowing black pants and a puff-sleeved white shirt.

She captured her audience immediately by "Killing Me Softly," with a fast-paced rendition of the song that was a No. 1 hit for Roberta Flack in 1973. Admittedly, it was easy prey, having been worked up to an emotional crescendo by her DJ during the long wait. In the last stretch before her appearance, he played hits by Whitney Houston and MI to the dancing and singing crowd.

The hopeful and inspiring "Everything is Everything," so technically timely with its lyrical line "After winter, must come spring," came next, after which Hill inexplicably exited the stage, and came back minutes later to deliver as rapidly as she had started, "Superstar" and the redemptive "Forgive Them Father."

By this fourth song, it was clear that we would be treated mostly to new arrangements of Hill's repertoire - faster, stronger, and livelier than the languorous mood that characterizes some of her melodies, and that ultimately seemed improvised on the spot. Pure live entertainment!

The slow, laid-back tempo of "How Many Mics" from The Score album, for example, was transformed into a furious torrent of guitar riffs and rapid rapping vocals. "Final Hour" got the same quickened treatment. At times

Startup

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#### FRESH START

right before I go to sleep.

# Core blitz part II

#### Keep your core strong with these easy, 5-10 minute circuits you can do at home

By Allison Hamilos STAFF WRITER

Now that you have some good reasons to get your core in gear, here's a work out for you! These circuits only take about 5-8 minutes, and you can do them at home! I like to do core and stretch every night

These circuits are only as hard as you make them:

If you don't have much practice with your core, start small. Try to do 5-10 reps or at least 20 seconds of an exercise. If you can't do one of the moves at all, it's okay to skip it and do more of another until you are stronger. As my trainer Mike said, you want to feel like "steel wrapped in cotton" as you do these moves. By that, he means you want to be strong and poised, moving smoothly and under control. Don't flail! In every move, your tummy muscles should be pulled in tight, or "engaged."

A good workout will "burn" or make your muscles sore, but it should never hurt. So if something feels wrong, stop immediately and see one of the athletic trainers for advice (they live in the Z-Center). If you have any questions about how to do the moves or alternatives, shoot me an email at freshstart@tech.mit. edu and I'll try to help out.

Hungry for more core? Try out some of the group exercise classes in Pilates and Yoga offered by DAPER physical education or the Z-Center. These longer workouts will complement your daily routine and offer a break from your usual routine.

Disclaimer: I may be a premed, but I'm not a doctor yet! The core of this article (ha-hah!) is based on things I've learned from the MIT Women's Lacrosse Coaches, strength trainers, athletic trainers, and physical therapists. You should always check with a doctor before starting a new fitness regimen and consult an athletic trainer if you're unsure about how to exercise safely. Be healthy, train healthy!

# Cycle 1



#### Plank 30s, 60s, 120s

back, abdominals, obliques, gluteals Start on your tummy. Move to pushup position, but place your forearms flat on the ground. Keep your arms and hands shoulderwidth apart.



# Side plank 15s, 30s, 60s obliques, hips

Start on your side. Put your weight on your forearm and push yourself up. Your legs and torso should be a straight line that forms a triangle with the ground with your arm.



#### Perfect Crunch 5, 25, 50

Lie on your back. Draw your knees up so your feet are flat on the ground. Extend your hands directly at the ceiling and focus your eyes on a single point above you. Keeping your eyes trained on the ceiling, clench your tummy hard and lift up for 5 seconds, then slowly return to the ground. Your shoulders should have lifted off the ground. If it becomes easy, you can hold a light weight over your head, like a book, etc.



# Deadbug 25s, 45s, 60s lower abdominals, lower back

Lie on your back. Bend your knees and lift your feet off the ground. Your upper leg should be perpendicular to the ground, and your lower leg should be parallel, forming an L." Keep your head flat on the ground and slowly touch your heels to the ground, one at a time while maintaining the "L" shape. The rate should be ~1 touch/second





#### Inverted Plank 30s, 45s, 60s

gluteals, abdominals

Lie on your back with your knees bent and feet flat on the ground, shoulder-width apart. Lift your hips up so that your body makes a triangle with the floor (your upper legs and torso form a straight line). Rest your upper torso on your shoulder-blades. Squeeze your butt and tummy to stay in place. If it gets easy, hold a weight above the joint of your hips and



# 45-degree Hold 15s, 30s, 60s

gluteals, lower back, abdominals hip flexors Lie on your back with arms relaxed at your sides. Keep legs straight and lift your feet up to 45-degrees. Hold!



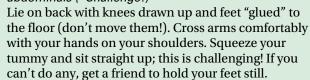
#### Dead Stretch

When you're done, lie stretched out on both your tummy and back. It should be very relaxing! Gently stretch anything sore.

# Cycle 2



# Perfect Sit-up 5, 15, 25 abdominals (\*Challenge!)





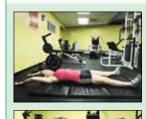
#### **Russian Twist**

20 touches, 40 touches, 60 touches

obliques, abdominals



Sit so that your torso is straight and about 60-degrees off the ground. Likewise, tuck your knees up so that your upper legs are also about 60 degrees off the ground (you will look like a "v"). Twist your torso so that you can tap the ground on your left side with the fingertips of both hands. Then twist the other direction. You can do this with controlled speed. As you become stronger, use a weighted ball to touch down on each side.



Sprinter Sit-up 10, 16, 30 abdominals, obliques (Only do one kind of Sit-up) Lie on back with legs extended and arms extended flat on the ground above your head. Using your abdominals, sit up while tucking one knee up so that the foot is off the ground. As you reach the top, twist your torso toward the bent knee. The opposite arm ends up tucked between the raised leg and torso. Repeat on opposite side (rapidly).



# Cyclist Sit-up 10, 16, 30 abdominals, obliques

Lie on back with knees drawn up, feet off the ground, and hands touching the sides of your head. Twist so that your elbow touches the opposite knee. It's like a twisty crunch. Make it harder by extending the leg that is not touching your elbow above the ground. Repeat on opposite side (rapidly).



#### Inverted Plank 30s, 45s, 60s

As described in Circuit 1.



#### Alternating Arm/ **Leg Raise** 6, 10, 16

lower back, gluteals

Start on your knees and place hands shoulder width apart on ground. Your body should look like a table. Simultaneously raise and extend the right arm and left leg parallel to the ground while balancing on the other arm/leg. Hold two seconds, slowly return to start and repeat with left arm/right leg. Hold the last rep 10 seconds.

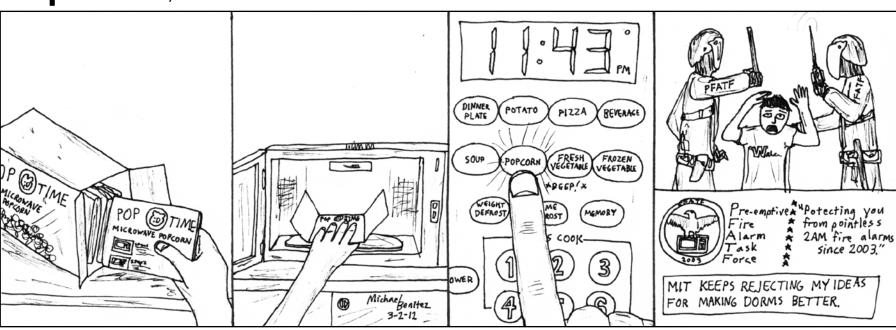


#### Dead Stretch

Same deal as Circuit 1: When you're done, lie stretched out on both your tummy and back. It should be very relaxing! Gently stretch anything sore.

# FUNFUNFUNFUNFUNFUN

# Help Desk by Michael Benitez





# **UPPERCUT** by Steve Sullivan







# T FORMATION by Richard Silvestri

Solution, page 7

#### **ACROSS**

- 1 Fill a space
- 5 Taproom display
- 9 Something to make or steal
- 14 Oratorio performance
- 15 Conversation filler
- 16 Tourist center of Egypt
- 17 Ancient Brit off to one side?
- 19 One multiplying by
- dividing 20 Stick fast
- 21 Pointed comedies
- 23 Certain sweater
- 26 Lamblike
- 27 Greenish blue
- 31 Potions teacher at Hogwarts
- 33 Weightlifting maneuvers
- 35 Threw with force
- 37 Sidekick
- 40 Chance to use an atomizer?
- 43 Frat letter

- 44 Flaxen
- 45 Construction worker
- 46 Accepted eagerly 48 British islanders
- 49 Browser module
- 54 Accomplishment
- 56 Clothing lines
- 58 Ferocious
- 63 Phones
- 64 Dances of long ago?
- 67 Party VIP
- 68 Poster person, perhaps
- 69 Part of a plan
- 70 People with visions
- 71 Plane's tip
- 72 Play award

#### **DOWN**

- 1 Hemingway nickname
- 2 Rain-starved
- 3 Highly caloric
- 4 Duchess of Cambridge, in
- headlines 5 Matures
- 6 NATO charter member

- 7 Marie's sea
- 8 Hardens
- 9 Shade of gray
- 10 Chef's spice 11 Bring to bear
- 12 One of the Prize
- guys
- 13 Obliterate 18 Biblical vessel
- 22 Emissary
- 24 Where everybody's going
- 25 Like a hawk
- 27 Highest point
- 28 Say uncle
- 29 "Major" in astronomy
- 30 Elev.
- 32 Indiana school
- 34 Weep audibly
- 36 Bubble source 37 It's southwest of
- Bologna
- 38 Loads 39 Wild feline
- 41 China piece 42 '60s war zone
- 10 11 12 16 18 19 23 24 | 25 27 | 28 | 29 | 30 33 37 | 38 | 39 43 44 45 48 49 |50 |51 |52 |53 55 54 56 59 60 61 58 63 64 65 | 66 67 68 69 72
- 47 Grinding tool
- 49 Lots of plots
- 50 First-quality
- 51 Pound fractions
- 52 Draft pick
- 53 Twisty turns
- 55 Small portion
- 57 Washer cycle
- 59 Really big 60 Clarinet range
- 61 Hidden valley
- 62 Make out visually
- 65 Ruckus
- 66 Call for help

Friday, March 2, 2012

# A WEBCOMIC OF ROMANCE, SARCASM, MATH, AND LANGUAGE by Randall Munroe

#### [1023] Late-Night PBS

HAVE YOU EVER
WATCHED PBS
LATE AT NIGHT?

I FELL AGLEEP
AFTER DOWNOW
AND WOKE UP
AT LIKE 3 AM.

WHERE IN THE WORLD IS CARMEN
SANDIEGO WAS BACK ON, EXCEPT
THE HOST HADN'T AGED WELL AND
HE'D CLEARLY BEEN DRINKING.

EVERY QUESTION TOOK THEM TO SOME
HORRIBLE PLACE LIKE MOGADISHU
OR THE CAMBODIAN KILLING FIELDS.



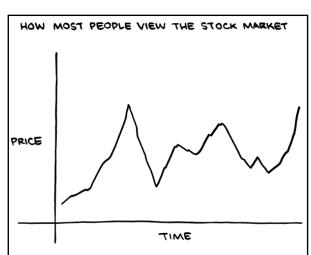
THE CHIEF APPEARED AND ASKED "ARE YOU PROUD OF WHAT YOU'VE BECOME?"
THEN ROCKAPELLA WALKED OUT AND JUST GLARED AT THE KIDS UNTIL THEY STARTED CRYING.

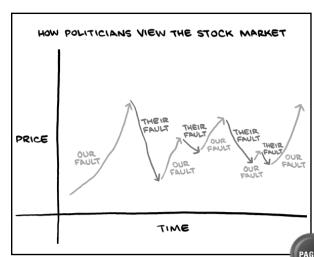
I, UH, DON'T REMEMBER THE OLD SHOW BEING THAT DARK.

MAYBE WE WERE TOO YOUNG TO PICK UP

Then it switched to these old black-and-white tapes of Bob Ross slumped against the wall of an empty room, painting the least happy trees you've ever seen. Either PBS needs to beef up studio security or I need to stop using Ambien to sleep.







ON IT.



by Jorge Cham









WWW.PHDCOMICS.COM

#### Sudoku

Solution, page 15

	3			2			6	1
7		6	9		4			
	1				6			
			1	5			2	7
9								4
1	5			4	2			
			4				5	
			5		1	8		6
6	7			9			4	

#### Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

# Techdoku

Solution, page 15

120×					6
20+			12×		i !
				i ! !	; ; ; ; ;
		60×			5
6×			13+		7+
	8×			1–	
6		15×		<b>-</b>	2

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

# FG students discuss challenges and share stories

#### First Generation Project recently launched to reach out to FG community on campus

First generation, from Page 1

mal discussion about life as an FG student. Alonzo shared stories of the days he went without food to send as much money home as possible, "Miri told me 'you will be the catalyst for this internal dialogue for the first-generation community," he said.

"We had been thinking for a while that we needed to do more for first-generation students," said Julie B. Norman, director of the UAAP and senior associate dean for the Department of Undergraduate Education (DUE).

Skolnik paired up with Norman to host an event on Feb. 17 last year, where about 30 FG students met for dinner. Provost L. Rafael Reif and Belcher both spoke about their experiences as FG students, but the keynote address came from Alonzo.

"Ruben really inspired me," Luis A. Juárez '13 said. "That really compelled me to know that there was a lot of potential in that group of students and that it was underrepresented, so I felt the need to do something about it."

It was an emotional event and Skolnik said a lot of people were in tears throughout the dinner. It gave these faculty and students the opportunity to talk about the most personal aspects of their roots, including personal sacrifices and their wish to help lift their family. From the students' feedback, it was clear that there was a real need for an ongoing program for FG students, Skolnik said.

The FG community longed for that "internal dialogue" Skolnik had envisioned with Alonzo earlier in the year, and the FGP was designed to fill that void.

A student advisory board was

formed of Juárez, Melanie C. Adams '13, Peter T. Nguyen '14, and Melanie I. Alba '13, who report to Norman, as the UAAP funds and sponsors the FGP. As the project's scope came into focus, it was agreed that FGP would provide FG students with a sense of community and opportunity for networking, reduce their sense of isolation, and instill a sense of pride in their status as FG students.

"It feels great to be working with students sharing part of your background," said Juárez, the president of the advisory board.

His first exposure to FGP was by pure chance: "I was just around in an Athena cluster and I saw the email [invitation to the first FGP dinner] and I was like 'OK, that's happening today, there's food so why not go.' I just showed up and it definitely changed my mind of things, first-generation-related."

Nguyen, a member of the MIT Gymnastics team, is also the liaison for the MIT chapter of the Quest Scholars Network, a network of participating schools and student-finalists of the QuestBridge need-based scholarship program. According to him, about half of the applications he sees are from FG students.

The experience, he said, has been rewarding: "I thought it would be a great opportunity to give back to a program that has helped me get to where I am today."

The student executive board wrote their own entry alongside Skolnik and Belcher's FNL article, outlining their goals for the FGP. Their message was simple: "As the FGP Student Executive Board, we are dedicated to supporting and empowering all of the pioneering students breaking new ground in higher education."

#### FG students face unique challenges

When students apply to MIT, they are asked to identify their parents' highest level of education. The wording of this question is crucial, Skolnik said. "If MIT asked 'Are you a first-generation student?" many students wouldn't know what that means. It's not acknowledged as a salient part of their identity."

"Getting to MIT is different from getting through MIT," Skolnik said, citing the unique position in which FG students find themselves and their shared resourcefulness. For a number of reasons, "FG students are part of an invisible population that isn't really talked about."

First, FG status often overlaps with socioeconomic status. Many FG students send money home to help their families. Meanwhile, they might have roommates whose parents are CEOs, leading scientists, or wealthy physicians. "There's somewhat of a stigma or sense of shame when surrounded by so many accomplished, educated individuals," Skolnik said.

Before becoming involved in the FGP, said Juárez, "I never felt that I could talk freely to anyone about those subjects, about being FG, what it meant, things I had gone through to get here — those are just some of the things that you never touch upon with other people."

Another reason for the hidden nature of this community is the FG students' sense of isolation from both their peers at MIT and their family back home. "People don't know who other FG students are," Skolnik said. "There's a perception that they're the only one."

Skolnik says a college education brings new concepts and cultures that are foreign to FG students' families. How do you explain ther-

modynamics to a parent who only took algebra?

"My mom still confuses Yale with MIT," said Andy J. Liang '14, an opinion editor for *The Tech*.

"Once you're actually here, you're faced with a lot of homework and troubles. Your parents don't usually understand why you need to pull an all-nighter and things like that," Juárez said, adding that he had to face the question "why are you not getting all A's anymore?" from his parents.

"They can't truly know what it's like because they've never been there. It's not that they don't want to be helpful, they really want to be helpful; they're your parents. It's just one of the things that they don't have experience with," he said.

Along with the isolation, Skolnik says FG students can experience a lot of pressure to succeed. According to Skolnik, "being the first in one's family, often the first in one's community, [to go to college] was a very rare, remarkable exception" for some students. With the front-page newspaper articles and special attention, "the community threw a virtual parade for these students." Once FG students arrive at college, there's an enormous sense of pressure to make their community proud.

"They don't want to let people down," Skolnik said.

Alban C. Cobi '12 agrees. "I think non-FG students should know that FG students most of the time do not come from the same financial background as them, and they have a family at home that depends on their success because their family wants to see all the hard work and challenges they put up with over the years be worth it at the end," Cobi said

And it's not just students who know what it's like to be FG. History professor Craig S. Wilder, biology professor and Nobel Prize-winner Philip Sharp, Dean of Admissions Stuart Schmill '86, Associate Director of Admissions Matthew L. "Matt" McGann '00, UAAP Associate Dean Donna L. Friedman, DUE Communications Manager Anna B. Klein, and physics professor and Nobel Prize Winner Frank Wilczek are just some of the current members of MIT faculty and staff who were FG students themselves.

#### Students at FGP dinner share moving stories

This past Monday, the theme to the FGP dinner was "Managing Family Responsibilities with Academics." For more than an hour, the tables of FG students were alive with conversation. Through tears and laughter, students described what they had to overcome just to get into MIT

During the event, Juárez stood at the front of the room to tell his story of being an FG student, something that he hasn't shared with some of his closest friends.

In 2001, Juárez and his family moved from Mexico to Houston; he and his mother cleaned homes every Saturday morning. "I was happy, it was rewarding," Juárez said. He was happy to help his mother, but couldn't help but notice the peculiarity of his weekend routine.

"I began to realize my friends' moms didn't clean houses," he said.

The differences became more and more obvious. Juárez' father, wearing work jeans, boots, and a hat from his job in construction, drove a Nissan '95 pickup truck. Juárez says he felt ashamed when his dad would pick him up from school.

In his first semester at MIT, Juárez transitioned with relative ease. He tried out for varsity soccer and made the team, pledged a fraternity, and regularly attended Mass.

"Those things kept my body and mind busy," Juárez told *The Tech*. "One of the things that I found here at MIT that was very good, very

rewarding was the Tech Catholic Community, actually. That was a strong connection that I felt to back home."

"And then the second semester, I felt it was more tough because soccer had ended and I came a week and a half early for work week because I had pledged a fraternity, so there was that time which I just had to do work, you know, and it was manual work, and I was like 'I could be helping my family, ... taking my grandma to get groceries, or my brother, I would take him to school,' so I was like 'why am I even here?"

As he explained at Monday's dinner, Juárez had tears in his eyes as he tried to explain his situation to a fellow fraternity brother. "I tried to make him see my point, but he couldn't see it," Juárez said.

Given the circumstances, however, FG students are exceptionally optimistic. "There's a lot more I can do than I can't," said Liang.

"We were just working all the time," Cameron S. McAlpine '13 said about growing up in Oregon. He said his parents taught him from an early age that "in order to get anywhere in life, you need to do work."

Being accepted into MIT was "such a far cry from anything else that had happened to my family," McAlpine said. But once school started, he realized hard work alone doesn't always guarantee success. "I felt bad asking for other people's help. I felt guilty." Despite his tough time adjusting to the workload, his parents remained calmly supportive. Together, they agreed that McAlpine's priorities should lie in his academics, the varsity crew team, and his fraternity.

Cobi says working with his family helped him see beyond the lower income of his family members. In an email to The Tech, he noted: "I used to work with my uncles and cousins in construction when I was in high school and the work was burdensome and very tiring, but at the end of the day very rewarding. The work was real because at the end of a project we would see the results such as a wall, a set of new stairs, or a fence surrounding the whole house. My uncles did not attend college, yet they are still doing the type of work that's really useful

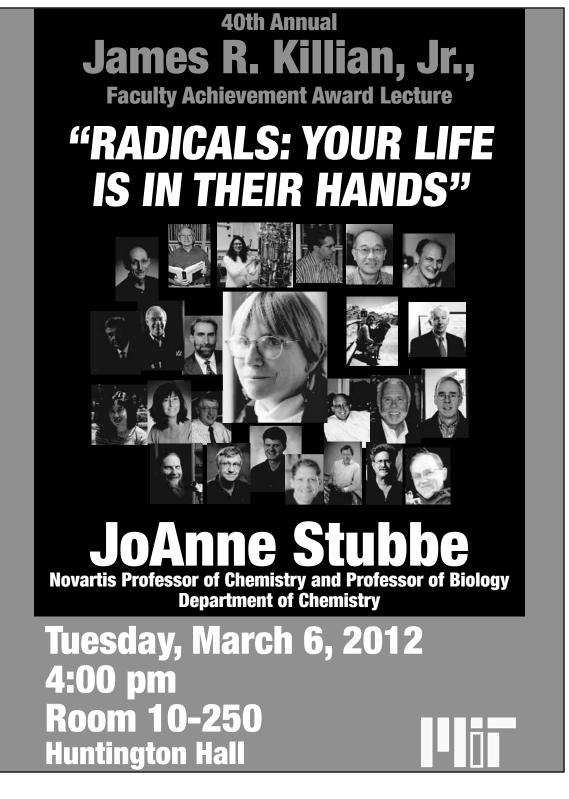
"The type of work I see people going into after college, and from my own internship experience, is nothing like what my family does. As a Course 2, for example, you'd have a job sitting in front of a computer modeling things, or managing bigger projects and attending meetings all day," he said.

Melanie C. Adams '13, a member of the FGP exec board, was first exposed to MIT during Interphase, a summer program hosted the Office of Minority Education designed for high-school students admitted to MIT. The transition was a difficult one: "I called home in tears almost every day. I hated the world," Adams explained at Monday's dinner.

Once at MIT, Adams vowed she would never ask her parents for money, and looked for a UROP to get an income. In her first off-campus job, she says she wanted to tell her employer "I think you guys paid me too much," because she couldn't believe what the paycheck said.

The feedback from FG students so far has been overwhelmingly positive, according to Skolnik. She said that FG students appreciate that the FGP gives FG students the opportunity to feel like part of a community for once and to share stories that they kept silent.

In its first year, the project has certainly started an important conversation within the FG community, but there's more work to be done. "I think FG project is a great idea, they just need to reach out to other FG students. There's way more FG students at MIT, and I think reaching out to them would be great," Cobi said in an email to *The Tech*.



FRIDAY, MARCH 2, 2012 **THE TECH 13** 



Reactions from two atheist and two Christian professors

# George Barbastathis Professor of Optics & Mechanical Engineering MIT Department of Mechanical Engineering

# José Gómez-Márquez D-Lab Health Instructor

Innovations in International Health

#### Rosalind Picard

MIT Media Lab

#### Susan Silbey

Professor of Sociology and Anthropology MIT Department of Anthropology

#### Moderated by

#### Ian Hutchinson

Professor in the Dept of Nuclear Science & Engineering

Veritas Forums exists to engage students and faculty in discussions about life's hardest questions and the relevance of Jesus Christ to all of life.



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MIT Dept of Linguistics & Philosophy





# Obama aims for a push while in New Hampshire

Discusses strategies over gas prices and enjoys increase in New Hampshire support

By Sarah Schweitzer
THE BOSTON GLOBE

NASHUA — President Obama, in his second visit in three months to the battleground state of New Hampshire, fiercely defended his energy policies Thursday against Republican attacks, offering a preview of his strategy to quell voter anger over rising gas prices.

Holding a color-coded chart to illustrate his points, Obama said his administration has decreased dependence on foreign oil and stepped up domestic oil production in recent months. Rising gas prices are a function of global markets, particularly instability in Iran, he said, which is best countered with expanding sustainable energy sources and ending \$4 billion in subsidies annually given to oil and gas companies.

"Let's put every single member of Congress on record," Obama told a crowd at Nashua Community College. "You can stand with the oil companies, or you can stand up for the American people. You can keep subsidizing a fossil fuel that's been getting taxpayer dollars for a century, or you can place your bets on a clean-energy future."

Obama's remarks drew immediate rebukes from Republicans, including Mitt Romney, who said in Fargo N.D., "He's going to talk about how he's responsible for the increasing production of oil in this country, oil and gas in this country. Is he responsible for the increase? No, I didn't think so."

Gas prices have steadily ticked up in 2012 — an anomaly because gas prices typically drop in winter months with lower demand as cold weather keeps drivers indoors. Retail gasoline prices rose Thursday to a national average of \$3.74 per gallon, with analysts predicting that prices will top \$4 by springtime, perhaps exceeding the highest-ever price of \$4.11 during the summer of 2008.

Republicans have seized on gas prices as a potentially vulnerable pocketbook issue for the president. High gas prices during the 2008 presidential campaign played, for a time, to the benefit of Obama's Republican challengers and inspired Sarah Palin's now-famous campaign cry of "drill, baby, drill."

Obama's choice of New Hampshire as a backdrop for his retort to Republican criticism comes as his fortunes here are rebounding. WMUR Granite State Poll results released last month showed Obama's approval ratings at their highest levels since July 2010, with 51 percent of New Hampshire adults saying they approve of the job he is doing, 43 percent disapproving, and six percent neutral. The figures are higher than his national ratings and higher than George W. Bush's New Hampshire approval rating at the same time in 2004, according to the poll.

That's a marked turnaround from only a short time ago. After winning the state in 2008 with 54 percent of the vote, Obama and his fellow Democrats saw an abrupt change in fortune here. In the 2010 midterm elections, voters driven by Tea Party fervor put Republicans in control of the state Senate and House. Republicans picked up a US Senate seat and both of New Hampshire's seats in the US House.

When Obama visited New Hampshire in November of last year, his numbers reflected the weak popularity of his party, with a Bloomberg News poll finding that only 40 percent of New Hampshire residents approved of Obama's job performance.

Dante Scala, a political science professor at the University of New Hampshire, said Obama's rosier outlook in New Hampshire in recent months owed to improved economic conditions and increased consumer confidence.

#### 'There are no quick fixes or silver bullets. If somebody tells you there are, they're not telling you the truth.'

Barack Obama

"New Hampshire weathered the recession a lot better than the rest of the country, but there still was a great deal of anxiety about the economy," Scala said. "And now New Hampshire voters are looking around and seeing good news at home and better news across the country."

Seeking to capitalize on the momentum, Obama was in buoyant campaign mode Thursday. Against a backdrop that announced, "An America Built to Last," Obama

rallied the crowd with attacks on what he called Republican efforts to capitalize on high gas prices for political gain.

"I know this is hard to believe but some politicians are seeing higher gas prices as a political opportunity," he said. "You're shocked, I know."

He added, "Only in politics do people respond to bad news with such enthusiasm."

Obama's energy policy remarks followed a similar speech in Miami last week. At Thursday's event, Obama repeated the punchline he'd used last week, saying, "We're going to be hearing a lot about how people have these magic three-point plans to make sure you're only paying two-dollar-a-gallon gas. ... You know what the essence of their plan is going to be, which is: Step one, drill. Step two. drill. Step three, keep drilling."

He continued, "There are no quick fixes or silver bullets. If somebody tells you there are, they're not telling you the truth."

Fellow Democrats have been pushing Obama to tap into the US Strategic Petroleum Reserve as a way to curb rising gas prices.

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Somerville, MA



# Lauryn Hill plays the House of Blues

Fuses old and new styles

Lauryn Hill, from Page 8

though, the rock beats and techno tendencies of some songs drowned out her voice, which combined with her very fast delivery throughout the 1 hour 45 minute show might have made it hard for the Lauryn Hill novice to recognize the lyrics and melodies.

But this strategy of recreating her work through upbeat and unpredictable renditions of her most popular songs, and eventually an entirely different sound and vibe than *Miseducation*, resulted in a party atmosphere and prepared us for a surprise with "To Zion."

Hill modified this personal song (inspired by her first pregnancy and motherhood) for her live performance; adding turntable-scratching purcussive sounds to the Motown vibes. She also allowed her band (consisting of a DJ, three backup singers, a bassist, a drummer, three guitarists, and three keyboard players ) to take some of the spotlight.

#### Her lyrics have been praised for the integrity and high morals and ideals they convey.

After "When It Hurts So Bad, I Used to Love Him," and the first slowly delivered song of the show, "Nothing Even Matters," she wiped away one tear in each eye. "You feel better now?" she asked.

By then, around 10:30 p.m., I was getting antsy for my favorite Fugees track, as well as all-time favorite song (incidentally, one that also tops President Barack Obama's top 10 list for music magazine Blender in 2008): the broodingly haunting 1996 single "Ready or Not."

But Hill instead played a powerful, rearranged hard rap on "Lost Ones," "Ex-Factor," "How Many Mics," and "Every Ghetto, Every City," before launching into a speedy yet melodic medley that included "Fu-Gee-La" and "To Zion," among others.

Then at 11 p.m. sharp, the famous lines enraptured the room:

Ready Or Not, Here I Come, You Can't Hide

Gonna Find You and Take it Slowly

Ready Or Not, Here I Come, You Can't Hide

Gonna Find You and Make you want me.

Hill only caught her breath and slowed down for the original version of "Killing Me Softly." At the end, in response to an encore, she started "Turn Your Lights Down Low," which was originally sung with Bob Marley. "I want to give you some love I want to give you some good, good loving," she melodized, holding in her arms a little girl (her daughter Sarah, I assume) whom

she had waved to from backstage.
The Fugees singer cemented the

new Ms. Hill sound in everyone' ears and souls at the end, with another Bob Marley classic, "Could You Be Loved," and "Doo Wop (That Thing)," which everyone had been yearning for all night.

So, the verdict on the magic in the room?

Was it her voice? More expert ears than mine have detected in recent years a certain rasp in her voice, perhaps the result of the more energized singing and rapping that are precisely the trademark of her new live sound. But it certainly has retained its deep, warm quality, even if it is harder to detect in a party environment full of screaming hardcore fans.

Is it the lyrics? It is true that they have been praised for the integrity and high morals and ideals they convey, which is increasingly rare. Hill — the songwriter — has even been described as "an intellectual" for her cleverly written lyrics and complex concepts. Both Miseducation and MTV Unplugged No. 2.0 were inspired by her spiritual growth and life experiences. Despite their popularity, her songs make you think. Also in contrast to popular fare in the industry, no clothes have been removed to promote her albums, and aside from "Doo Wop (That Thing)," Miseducation is free of profanity which is rampant in Hip Hop and sub-genres.

One could say she scores high on the ethical scale.

Many have even praised her sophisticated flair and sense of fashion, which in her Fugees days she expressed through bringing a feminine touch to her generally male

To me, the most obvious reason for her international recognition as a crucial influence and pioneer of what is now called the "neo- or nu-soul" sub-genre, is her indefatigable quest for self-improvement and creative reinvention.

After a self-imposed exile from the public eye for several years and much introspection to confront her demons and disillusions about the music industry, she has reappeared — energized and ready to perform in new ways. Perhaps this is the essence of progressing as an artist. Instead of staying stuck in her 1990s sound, she has defied expectations and limitations and grown with the times; singing old songs differently, and delivering a show infused with a rock-reggae style that surprised everyone who was expecting the love-funk vibes of the Fugees era.

Was Lauryn Hill miseducated, or were we miseducated about Lauryn Hill? It might be both. In any case, she does sound like an artist to whom life-long learners might easily relate. At least students at MIT and other colleges might do, if only judging by the initial lyrics of her *Miseducation* album song

"Final Hour":

I treat this like my thesis

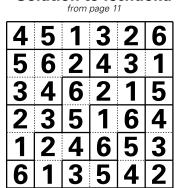
Well-written topic

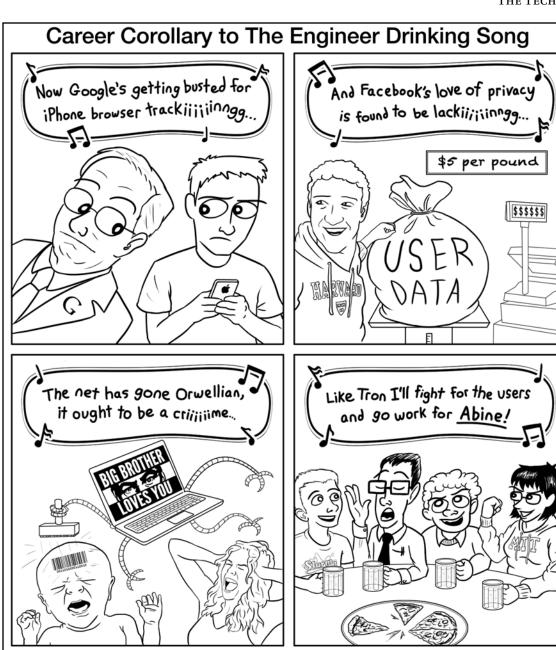
Broken down into pieces
I introduce then produce

Words so profuse
It's abuse how I juice up this beat.

#### Solution to Sudoku from page 11 Solution to Techdoku

nom page 11									
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7	2	6	9	1	4	3	8	5	
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8	4	3	1	5	9	6	2	7	
9	6	2	7	8	3	5	1	4	
1	5	7	6	4	2	9	3	8	
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2	9	4	5	3	1	8	7	6	
6	7	5	2	9	8	1	4	3	







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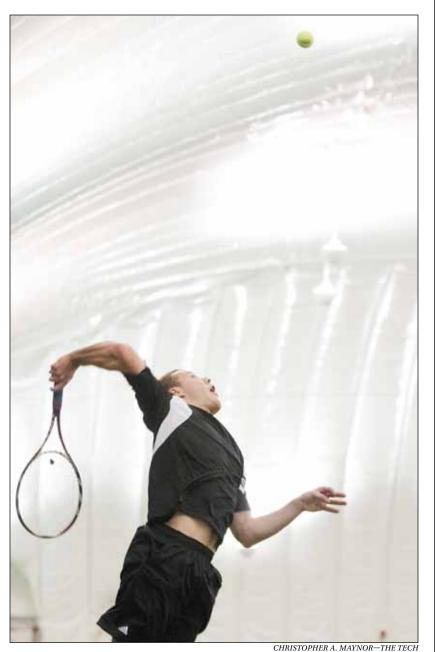
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Elia S. Harmatz '12 serves against an opponent from Eastern Nazarene College on Thursday evening. He played first singles and won 6-0, 6-1. MIT won

#### **UPCOMING HOME EVENTS**

#### Friday, Mar. 2

Men's Tennis vs. Bentley University

Saturday, Mar. 3

Men's Volleyball vs. Mount Ida College Men's Volleyball vs. NYU 3:30 p.m., J.B. Carr Tennis Bubble

11 a.m., Rockwell Cage 3 p.m., Rockwell Cage

# MIT Volleyball victorious

#### Team wins Saturday's Baruch Invitational

By Paul Dill
TEAM COACH

The nationally-ranked No. 5 MIT Men's Volleyball team won the Baruch College Invitational this past weekend with a 3-1 record. On Saturday, the Engineers defeated

the No. 12 Bearcats (25-20, 25-20, 25-27, 25-21) but fell to Kean University (26-24, 22-25, 29-27, 25-20). The next day, MIT earned hard-fought victories over No. 15 Emmanuel College (25-17, 23-25, 25-18, 32-30)

and No. 7 Stevens Institute of Technology (25-19, 26-24, 18-25, 11-25, 17-15).

In the opener with Baruch, junior Matthew P. Hohenberger led the way with 17 kills and a .448 hitting performance while sophomore Kenneth M. Siebert tallied 14 kills, five digs, and four aces. David R. Thomas '12 posted 11 kills, a .364 hitting performance, and two blocks as classmate Jeremy J. Velazquez '12 collected a teamhigh seven digs. Patrick J. Vatterott '13 contributed three blocks while Paul M. Syta '14 compiled 47 assists, six digs, four blocks, and three aces.

In the program's first meeting with Kean, Siebert totaled 14 kills, six digs, and two blocks as Hohenberger notched nine kills and two aces. Freshman Alexander C. Klein also had nine kills while Vatterott recorded seven kills and five blocks. Velazquez collected 13 digs as Thomas added six of his own. Syta finished with 38 assists, seven blocks, and three aces.

Hohenberger was a force to be reckoned with against Emmanuel as he amassed 21 kills, a .432 hitting percentage, five aces, and three blocks. Siebert followed with 19 kills, 10 digs, and two aces while Thomas registered 11 kills, five blocks, and five digs. Vatterott added to the front row's dominance with eight kills and seven blocks as Velazquez racked up 15 digs. Senior Daniel C. Sngiem posted eight digs and two aces while Syta tallied 57 assists, 10 digs, six blocks, and two aces.

In the Cardinal and Gray's thrilling five-set battle with Stevens, Siebert totaled 21 kills, six digs, two aces, and two blocks. Hohenberger notched 13 kills while Klein contributed eight kills and three blocks. Thomas picked up six kills and two blocks as Vatterott tacked on five kills and five blocks. Syta recorded 52 assists, seven digs, and four blocks while Velazquez rounded out the squad with eight digs.

Next up for MIT (13-4) will be a tri-match on Saturday, March 3 in Rockwell Cage against Mount Ida College at 11 a.m. and No. 6 NYU at 3 p.m.

# Men's fencing team wins third at Vassar

9 qualify for NCAA Championship

By Mindy Brauer

DAPER STAFF

With a record of 62-24, the MIT

Men's Fencing team finished third out of 11 teams at the New England Championship hosted by Vassar College on Saturday.

Sophomore Ehsan Izadmehr registered the best individual outing for the Engineers as he placed fifth overall in the sa-

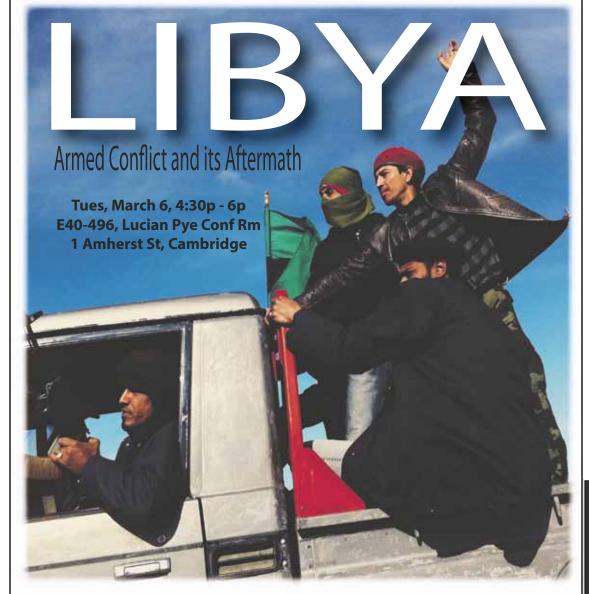
bre competition. He compiled a 7-3 ledger in the A pool and went 4-1 in semifinal action before posting a 2-3 mark in the final round.

The épée unit comprised of Joseph F. Rafidi '14, Jackson T. Crane '13, and David Wyrobnik '15 ranked second with a total of 22-6. Rafidi and Crane claimed seventh and eighth place as they had 9-1 outings in the A and B pools, respectively, and both won two of their five bouts in the semifinals. Wyrobnik rounded out the group with a tally of 4-4 in the C pool.

The foil team captured third place behind the strength of a 22-7 record. Senior Benjamin N. Nield led the way with a seventh-place finish after emerging from the B pool with a 7-3 ledger and a 2-3 performance in semifinal action. In the A pool, Daniel S. Levine '12 compiled a mark of 8-2 and followed that up with a 2-3 total in the semifinals en route to a ninth-place ranking. Alexander E.Siy '13 bolstered the Engineers' cause by going 7-2 in the C pool.

Izadmehr's outstanding performance helped propel the sabre squad to a fifth-place ranking and a record of 18-11. Vinayak Ramesh '12 went 6-4 in the B pool while Daniel L. O'Malley '14 came in at 5-4 in the C pool.

Next up for MIT will be the NCAA Regional Championship on Saturday, March 10 at Boston College. Thomas Boning, Crane, Izadmehr, Levine, Nield, Rafidi, Ramesh, Siy, and Wyrobnik will represent the Engineers at the qualifier for the NCAA Championship.





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